**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**LISTING OF CLAIMS:**

1-16 (Canceled)

17. Process for current limiting and/or circuit breaking with a liquid metal current switch which comprises solid electrodes and a liquid metal tank with at least one channel for a liquid metal, in the first operating state between the solid electrodes an operating current being routed on a first current path through the current switch and the first current path being routed at least partially through the liquid metal which is in the first position, wherein in a second operating state

a) the liquid metal is moved by a dielectric fluid drive which is controlled by a control along one direction of motion into at least one second position, a dielectric working fluid being used which acts mechanically directly with a definable drive pressure on one surface of the liquid metal, and

b) the liquid metal in at least one second position is located at least partially in series with the dielectric and in this way a current-limiting and/or current-interrupting second current path is formed by the current switch, and

c) for a given voltage level a maximum electrical resistance of the dielectric being dimensioned to a finite value according to the current which is to be limited or to a dielectric insulation value for interrupting the current.

18. Process as claimed in claim 17, wherein

a) the working fluid is a dielectric gas and/or a dielectric liquid and the working fluid is essentially not mixed with the liquid metal and

b) especially wherein the working fluid is an insulating gas, especially dry air, nitrogen, sulfur hexafluoride, argon or a vacuum, and/or an insulator liquid, especially transformer oil or silicone oil.

19. Process as claimed in claim 17, wherein

a) the drive pressure is chosen to be slightly lower than the surface tension of the surface of the liquid metal which is exposed to pressure and/or

b) the liquid metal in the first and in the second operating state remains in the liquid aggregate state.

20. Process as claimed in claim 17, wherein

a) the dielectric is a resistance element with a definable electrical resistance,

b) the liquid metal in a transition from the first position to the second position, especially to an extreme second position is guided along the resistance element and

c) the resistance element has an electrical resistance which increases along the direction of motion of the liquid metal for the second current path.

21. Process as claimed in claim 17, wherein in the third operating state

a) the liquid metal is moved along the opposite direction of motion into at least one third position and

b) the liquid metal in at least one third position is in series with an insulator and thus an insulating clearance for circuit breaking by the device is formed and

c) especially wherein the third operating state is triggered by an interruption command by which the fluid drive is switched over between operation of the current switch as the current limiter and as a circuit breaker.

22. Process as claimed in claim 17, wherein the dielectric fluid drive is a pressure drive with pressure vessels, valves and a control for a working fluid by which a working pressure vessel for the working fluid for moving the liquid metal can be connected to an interruption pressure vessel for contact opening of the liquid metal and to a connection pressure vessel for contact-closing of the liquid metal.

23. Process as claimed in claim 17, wherein the dielectric fluid drive is a piezodrive with at least one piezoelectrically driven piston and the drive fluid is incompressible and with a pressure which can be dictated by the piston acts mechanically directly on the first surface of the liquid metal.

24. Process as claimed in claim 23, wherein

a) the liquid metal is carried over the first surface by the drive fluid and the liquid metal is moved for contact opening by the piezodrive such that a contact gap between the solid electrodes is filled with the drive fluid and/or

b) the area of the piston is greater than or equal to the piezoelectrically driven area of a piezoactuator of the piezodrive.

25. Liquid metal current switch for current limiting and/or circuit breaking, especially for executing the process as claimed in claim 17, comprising solid electrodes and a liquid metal tank with at least one channel for a liquid metal, in the first operating state between the solid electrodes there being a first current path for an operating current through the current

switch and the first current path leading at least partially through the liquid metal which is in the first position, wherein

a) a dielectric fluid drive has a working fluid and a control and is designed for moving the liquid metal along one direction of motion into at least one second position, the working fluid being dielectric and acting mechanically directly with a definable drive pressure on one surface of the liquid metal, and

b) in the liquid metal tank there is a dielectric and

c) in the second operating state the liquid metal in at least one second position is at least partially in series with the dielectric and thus forms a current-limiting and/or current-interrupting second current path in the current switch,

d) for a given voltage level a maximum electrical resistance of the dielectric being dimensioned to a finite value according to the current which is to be limited or to a dielectric insulation value for interrupting the current.

26. Liquid metal current switch as claimed in claim 25, wherein

a) the drive pressure is rated according to the switching time of the current switch, especially according to the overcurrent which is to be limited, and a path-time characteristic of the liquid metal in the second current path which is necessary for this purpose, and/or

b) the drive pressure is chosen to be lower than the surface tension of the surface of

the liquid metal which is exposed to pressure.

27. Liquid metal current switch as claimed in claim 25, wherein

a) the cross sectional area of the liquid metal in the first current path is dimensioned according to the current carrying capacity of the current switch and/or

b) the width and number of segments for separating the channels for the liquid metal and the type of working fluid are dimensioned according to the dielectric strength of the current switch in the second operating state; and/or

c) the cross section and the surface composition of the channels for the liquid metal and the type of liquid metal are dimensioned according to the required surface tension of the surface of the liquid metal which is exposed to pressure.

28. Liquid metal current switch as claimed in claim 25, wherein

a) the dielectric comprises a resistance means which for arc-free current limitation has an electrical resistance which increases continuously along the direction of motion up to an extreme second position for the second current path and/or

b) the dielectric comprises an insulator which is designed for current interruption, especially with arc formation.

29. Liquid metal current switch as claimed in claim 25, wherein

a) in the liquid metal tank there are several channels for the liquid metal which are essentially parallel to one another, which extended along the direction of motion x and which are separated by wall-like segments from one another and

b) the segments end in the area of the first current path in a common tank area for flow of the liquid metal together and for transmitting the operating current and the segments in the area of the second current path have individual resistances or individual insulators of the dielectric.

30. Liquid metal current switch as claimed in claim 25, wherein

a) the first path for the operating current, the second current path for current limitation and especially an insulating clearance for current interruption are arranged

essentially perpendicular to the direction of motion and/or are arranged essentially parallel to one another, and/or

b) at least the insulating clearance for current interruption is located above the second current path and/or underneath the first current path.

31. Liquid metal current switch as claimed in claim 25, wherein

a) the fluid drive has first means for producing a drive pressure in the fluid and second means for bringing the working fluid into contact with the liquid metal,

b) especially wherein the first means comprise an interruption pressure vessel for contact opening of the liquid metal and a connection pressure vessel for contact closing of the liquid metal, and

c) especially wherein the second means comprise at least one valve and a working pressure vessel for transferring the pressure from the working fluid to the liquid metal and preferably a compression pressure vessel with a captured compressible fluid for applying a resetting force to the back surface of the liquid metal.

32. Liquid metal current switch as claimed in claim 25, wherein the fluid drive has a piezodrive with at least one piezoelectric piston for moving the liquid metal .

33. Liquid metal current switch as claimed in claim 32, wherein

a) the piezodrive has a piezoactuator which by this movable piston and a dielectric drive fluid for transmitting pressure from the piston to the liquid metal and/or

b) the piezodrive comprises a pressure vessel for collecting the drive fluid and a drive channel for supplying the drive fluid to at least one channel for the liquid metal.

34. Liquid metal current switch as claimed in claim 32, wherein

a) the drive fluid of the piezodrive is an insulator liquid which is incompressible and which cannot be mixed with the liquid metal and which is in direct pressure exchange with at least one pressure-exposed first surface of the liquid metal and/or

b) in the second operating state the liquid metal is displaced by the piezodrive out of the contact gaps and is replaced by the drive fluid and/or the insulating gas.

35. Electrical switchgear assembly, especially a high or medium voltage switchgear assembly, comprising a device as claimed in claim 25.